

AMENDMENTS TO THE CLAIMS:

1. cancelled

2. (new): An apparatus comprising:

an input port receiving a WDM optical signal including a variable number of second optical signals having different wavelengths and monitoring the received WDM optical signal;

an optical amplifier which amplifies the received WDM optical signal with a first mode in which the received WDM optical signal is amplified with an approximately constant gain during a process of changing the number of second optical signals; and,

an output port outputting the amplified WDM optical signal and monitoring the amplified WDM optical signal output therefrom.

3. (new). An apparatus according to claim 2, wherein the optical amplifier amplifies the received WDM optical signal with a second mode in which the received WDM optical signal is amplified with a predetermined level.

4. (new): An apparatus according to claim 3, wherein the optical amplifier is switchable between the first mode and the second mode.

5. (new): A method of amplifying a WDM optical signal including a variable number of second optical signals having different wavelengths, comprising:

receiving the WDM optical signal and monitoring the received WDM optical signal;

amplifying the received WDM optical signal with a first mode in which the received WDM optical signal is amplified with an approximately constant gain during a process of changing the number of second optical signals; and,

outputting the amplified WDM optical signal and monitoring the amplified WDM optical signal.

6. (new): A method according to claim 5, wherein the received WDM optical signal is amplified with a second mode in which the received WDM optical signal is amplified with a predetermined level.

7. (new): A method according to claim 6, wherein the first mode is switchable to the second mode.